

Delaware Leading by Example

Executive Order 18: Progress Report 2012



Leading by example toward a clean energy economy and sustainable natural environment.

Tasks of Executive Order 18



- Energy Conservation and Efficiency
- Use of Clean, Renewable Energy
- Environmentally Responsible and Energy Conscious Construction
- Recycling
- Clean Transportation
- Environmentally Sensitive Procurement

Goals of Executive Order 18

- Reduce pollution and waste
- Reduce government spending
- Develop clean energy jobs
- Lead private sector by example

Governor Jack Markell

“State government must lead by example as it works towards transforming Delaware into a national model clean energy economy built on economic growth, environmental protection, energy conservation and efficiency, renewable energy, cleaner transportation options, and sustainable buildings and operations”

Executive Order Eighteen

Signed February 27, 2010



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Reduce Pollution and Waste



The State of Delaware is required to reduce pollution and waste by:

- Obtaining 20% of the state's electricity from clean, renewable sources by the end of FY2012; 30% by the end of FY2013
- Reducing greenhouse gas (GHG) emissions
- Diverting 75% of waste from landfills by the end of FY2012
- Developing and implementing environmentally sensitive procurement

Reduce Government Spending

The State of Delaware is required to reduce government spending by:

- Reducing energy consumption in buildings 30% by the end of FY2015
- Designing buildings to LEED Silver standards for maximum efficiency
- Reducing fuel consumption in state vehicles 25% by the end of FY2012
- Reducing state vehicle miles 15% by the end of FY2012



Implementation

- Cabinet Committee on Energy
- Workgroup of Sustainability Managers from each department
- Program to educate state employees

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Accomplishments To-Date

Clean Energy



The State of Delaware purchased 25% clean, renewable energy ahead of schedule through a collective reverse auction in 2010. The successful bidder supplied Green-e certified Texas wind to satisfy the clean energy component.

The contract included 1,000 aggregate partners statewide and locked in competitive rates for a 3-year term.

Several state agencies also added on-site solar energy. DeIDOT currently has 3 facilities running partially on solar energy; DOS has 1, and OMB has 2.

Together, these efforts allowed the State of Delaware to accept the EPA's Green Power Partnership, which requires a minimum of 20% green electricity. Partnership was accepted January 2012.

Energy Efficiency & Conservation



The State of Delaware began tracking energy consumption at state-owned facilities in 2010. To-date, there are 230 facilities tracked through the Energy Star's Portfolio Manager, which allows users to compare individual baselines, group baselines, and performance against national averages. The reports are weather normalized and updated monthly.

Analyzing these reports allowed the State to direct targeted energy efficiency and conservation measures for the greatest impact with the least upfront capital.

Delaware leveraged \$3 million in federal EECBG stimulus funds to be applied to facility improvements in 2011. These projects included building automation system (BAS) upgrades and installations, heating improvements, and PV installations. Projects covered 15 buildings, representing OMB, DSHS, DHSS, and DeIDOT.

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Energy Efficiency & Conservation (continued)

The State of Delaware also utilized the Sustainable Energy Utility (SEU) to secure over \$65 million in bonds to be applied to guaranteed energy savings agreements (GESAs). Over 3.7 million square feet of state-owned buildings were audited for improvements, and 36 facilities were selected, representing DOC, DeIDOT, DNREC, DOS, DSCYF, DHSS, DSHS, and OMB. Construction began February 2012 and is expected to be complete at most sites by Fall 2013. The resulting savings will be used to pay back the bonds. 5 other facilities were selected and funded separately through DeIDOT.

In addition, the State implemented several no-cost measures including the enforcement of personal appliance rules, thermal setback schedules, and power-conserving computer settings.

Overall, Delaware state government reduced energy consumption about 8% prior to the GESA construction phase; current reduction is at 11.6%. The State is expecting to reach at least 20% reduction with full implementation of the GESA contracts. Work is underway to strategize the efforts needed to reach 30% by the end of FY2015.



BETTER BUILDINGS CHALLENGE

New Partner: State of Delaware



Together, these efforts allowed the State to accept the President's Better Buildings Challenge June 2012. The challenge requires a minimum of 20% energy reduction across the entire portfolio by 2020 – the state exceeds this through Executive Order Eighteen.

Environmentally Responsible & Energy Conscious Construction

The State of Delaware has integrated LEED practices into all new construction projects, meeting or exceeding Silver standards. The most recent example is the new Kent County Courthouse in Dover; however, there are several other new construction projects underway at this time, and they are being designed to LEED Silver, as well.

As part of the GESA phase, Delaware is pursuing LEED certification for 2 existing buildings: Carvel State Office Building in Wilmington and Richardson & Robbins in Dover. Progress is currently underway at both locations, and applications to certify will be submitted in 2013.

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Recycling

The State of Delaware implemented single stream curbside recycling in 2010. To-date, 209 facilities are on the contract, and diversion has increased from 6% to 30%.

However, it is not enough just to recycle. As shown by the right-hand bin in the picture below, state agencies are also required to *reduce* on-site trash capacity and pick-up frequency. Successful agencies have accomplished this largely by reducing their printing needs. Double-sided printing and digital communications where possible have enabled these agencies to reduce paper purchases, cutting both waste *and* costs. Strategies are currently being developed to further increase diversion toward the State's target of 75%.



Environmentally Sensitive Procurement

Delaware has drafted a formal Environmental Procurement Policy that considers environmental interests in addition to cost. Considerations include recycled content, energy efficiency, green cleaning, and native

landscaping. The draft is currently being reviewed for public comment.

Clean Transportation

The State of Delaware installed tracking devices in state-owned vehicles in order to accurately trend usage data over time. At the same time, the State cut many vehicles from the contract to encourage employees to carpool and utilize teleconference alternatives to travel. During this time, several vehicles were replaced with hybrid models to drive additional savings. Since 2010 vehicle miles have reduced 28%; petroleum consumption has decreased 12%, and the State has avoided over \$2 million in transportation costs in 2012 alone.



Of note, van-pool and public transportation miles have increased 24% since 2010, indicating that the State has indeed begun to shift away from single-rider automobiles.

It should also be noted that the State's Fleet Services has been recognized each year since 2010 as a Top 100 Fleet in North America – there are over 38,000 eligible operations nationwide. Delaware ranked 55th overall in 2012 and ranked 2nd among state-operated programs. The award is given based on the dedication of each Fleet employee to ensure safe and cost-effective transportation.

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Greenhouse Gas Emissions

The State of Delaware's facilities have reduced greenhouse gas emissions 5% via conservation and efficiency measures. These emissions are tracked monthly through Energy Star's Portfolio Manager.

State facilities have also reduced GHG emissions an additional 25% through the reverse auction renewable energy contract, which was initiated in 2010.

In addition, the State of Delaware's vehicles have cut emissions over 12% through reduced drive miles and more efficient models.

Combined, over 20,000 metric tons of GHG emissions have been avoided through the requirements of Executive Order Eighteen. This is equivalent to 47,646 barrels of oil or 112 railcar's worth of coal. Way to go, Delaware!



Contact Information:

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